FINDINGS OF CONFORMANCE
MULTIPLE SPECIES CONSERVATION PROGRAM

SWEETWATER LOOP TRAIL
UH3106/COFD-00251

I. Introduction

The proposed project is to establish and formalize the northern portion of the Sweetwater Reservoir Loop Trail. The proposed project will connect to the existing southern portion of the trail system so as to allow for non-motorized recreational opportunities completely around the Sweetwater Reservoir, a 14.1-mile loop trail. The proposed project (northern loop trail proper) is approximately 5.3 miles in length. In addition, a trail segment (Segment 1a) will be constructed along an existing dirt path adjacent to the Bonita Golf Course between Conduit Road and the Bonita Road Bridge, connecting the entire loop trail (northern and southern portions) to an existing trail system to the west. Segment 1a is approximately 0.64 miles in length.

The proposed northern trail to be constructed by the County is divided into eight trail segments (Segments 1, 1a, and 3 through 8), including drainage crossings over several named and unnamed drainages, and two trail staging areas. Of the remaining segments of the northern trail section, Segment 2 will be the responsibility of Caltrans as part of mitigation for the SR 125 Extension Project; Segment 9 is expected to be constructed by the Pointe Development; and Segment 10 is expected to be constructed by the United States Fish and Wildlife Service San Diego National Wildlife Refuge. This document addresses the segments that will be constructed by the County (Segments 1, 1a, and 3 through 8).

The staging areas will serve as a trailhead and/or rest area providing hikers and equestrian riders access to both the northern and southern trail systems, as well as providing users with parking, bathroom and drinking water facilities, trash receptacles, equestrian hitching posts, and benches. Staging Area 1 is an existing facility with all the necessary amenities within County's Summit Park and can be accessed at the end of the Red Hill Trail. Staging Area 2 is currently a vacant lot located near the intersection of Lakeview Avenue and Quarry Road, which will require the installation of the above-mentioned facilities.

The northern portions of the Sweetwater Reservoir Loop Trail will be improved and maintained in accordance with the County of San Diego Trail Design Guidelines. Trail routes were selected to avoid and minimize potential impacts to streambeds and sensitive vegetation to the maximum extent practicable. The proposed loop trail will establish trails along existing disturbed trails (non-designated), paths and roadways wherever feasible. In general, the width of the trail tread shall vary between 8 and 12 feet with a minimum 10-foot overhead clearance. The width of the trail will be no more than 4 feet wide in areas adjacent to sensitive biological habitats, including wetland habitats. The trail surface will be removed of rocks, debris, and roots. An effective combination of site control, source control, and treatment control Best Management Practices (BMPs) are included in the project design for the northern trail system to reduce polluted runoff into the reservoir and minimize impacts to water quality.

Trail markers, intermediate markers, and/or lodge pole fencing will be used where necessary to encourage users to stay on the trails and to direct users to avoid sensitive biological areas. Trail markers will be placed at approximately one-fourth mile increments along the route. Trail markers shall be brown, flexible reinforced composite-fiberglass. The markers shall be approximately 72 inches high, 3 ¾ inches wide, 1/8 inch thick and weigh approximately 2 ½ pounds. Trail lighting is not permitted within wildlife habitat except where essential for roadways, facility use and safety. If such lighting is necessary, lighting within wildlife habitat or along its edges will be shielded and directed away from wildlife habitat and limited to low pressure sodium sources.

Physical and/or visual barriers such as natural vegetation, topography, limited fencing, and signage will be incorporated into project design to protect sensitive habitats, sensitive species, and wetland habitats by directing trail users to designated trails. The use of motorized vehicles on the trails is prohibited, except for wheelchairs, maintenance and emergency vehicles. Foot traffic, equestrian activity, and bicycling will be restricted to designated trails only. In addition, dogs must be leashed at all times and restricted to designated trails. The release or transplantation of non-native animals, fish, or vegetation, or the collection of plants, plant material, wildlife, or historic artifacts will not be allowed. In addition, hunting of animals or waterfowl along the trail segments or adjacent to the reservoir is prohibited.

During construction, temporary fencing will be installed to identify construction and staging area limits. All construction activities, including equipment storage, equipment cleaning, and stockpiling will occur within the identified construction areas. Fencing will be inspected prior to the start of construction and monitored during construction by a qualified biologist to avoid unauthorized impacts. Temporary watering of the

construction site will be conducted on an as-needed basis to prevent potential dust damage to sensitive vegetation and habitat.

This document only addresses the segments that will be constructed by the County (Segments 1, 1a, and 3 through 8). These segments are described below in more detail.

Segment 1

Segment 1 begins at the convergence of Sweetwater Road and Quarry Road and is approximately 2,900 feet long. From the trailhead, the trail moves south for approximately 1,050 feet, turns east for approximately 400 feet, and turns north again following the western boundary of the Bonita Golf Course for approximately 1,450 feet where it connects to Segment 4. This trail segment will be located within a trail easement varying in width from 12 feet to 20 feet, with the trail tread varying between 4 feet (adjacent to sensitive habitat) and 10 feet.

Drainage improvements required for this segment include installation of 18" and 24" corrugated metal pipe (CMP) culverts that will convey drainage from the trail and adjacent properties into a proposed 18" reinforced concrete pipe (RCP) stormdrain. The stormdrain will replace an existing wooden "trough" in order to properly convey stormwater during rain events and runoff from Sweetwater Road.

Caltrans will construct a bridge over the Sweetwater River within this segment as part of the mitigation requirements for the SR 125 extension.

Segment 1a

Segment 1a begins east of the Bonita Road Bridge and continues east along and existing trail at the southern boundary of the Bonita Golf Course to Conduit Road. This segment is approximately 3,379 feet in length and links the northern and southern portions of the loop trail to existing trails (formal and informal) to the west. The trail tread for this segment will be 8 feet to 10 feet wide within a 24-foot wide trail easement.

Drainage improvements required for this segment include installation of an 8" RCP culvert under the trail, associated head wall, catch basin and rip rap energy dissipator in order to convey nuisance flow from the adjacent homes to the south.

Segment 3

Segment 3 begins at Quarry Road approximately one mile northeast of the intersection of Quarry Road and Sweetwater Road and is approximately 220 feet long. This segment consists largely of a bridge over Spring Valley Creek that will connect Segment 2 and Segment 5. The pedestrian/equestrian bridge will be approximately 10 feet wide by 200 feet long. The bridge will be capable of carrying multiple equestrian riders. The bridge will be connected to Segment 5 via a short trail segment 10 feet wide and 20 feet long.

Segment 4

Segment 4 begins at the terminus of Segment 2 and ends at the beginning of Segment 5 (approximately 60 feet southwest of Segment 3) and is approximately 5,600 feet in length. Caltrans will construct the first 550 feet of this segment as part of the mitigation requirements for the SR 125 Extension Project. Along a portion of Segment 4 closest to the Sweetwater Dam, the trail will utilize the existing San Diego County Water Authority (SDCWA) easement on Sweetwater Authority property that is currently used as a maintenance road. For safety reasons, the trail tread in this area will be widened to 16 feet with a 28-foot turnout to accommodate trail users, Sweetwater Authority vehicles, and SDCWA maintenance vehicles. Signs will be posted along the trail alerting users of possible truck traffic in this area. Convex mirrors may be added if warranted.

Near the southern portion of this segment, an 18” RCP drainage pipe, wing walls at the inlet and outlet, as well as a rip rap energy dissipator will be constructed to convey water in this section under the trail. The trail itself will be constructed as a raised causeway approximately 650 feet in length.

Segment 5

Segment 5 begins at the terminus of Segment 4 (approximately 50 feet southwest of the terminus of Segment 3) and is approximately 1,640 feet in length. The trail will be 10 feet wide within a 20-foot wide trail easement.

Drainage facilities to be constructed as part of this segment include an 18” RCP culvert under the trail, associated wing walls, and a drainage ditch along the south side of the trail located approximately 300 feet east of the intersection of Segment 3 and Segment 5. The drainage ditch will convey water on the south side of the trail towards the new culvert.

Segment 6

Segment 6 will begin on the east side of Lakeview Avenue and travel in an eastwardly direction for approximately 4,121 feet along an existing trail. Segment 6 will consist of a 10-foot wide trail within a 20-foot wide trail easement.

Drainage improvements will consist of installation of two crossings traversing areas of disturbed freshwater marsh. The crossings will require the installation of culverts under the trail to allow for proper stormwater conveyance.

Segment 7

Segment 7 begins at the northeastern terminus of Segment 6. It runs parallel to the existing residential development and intersects with Sweetwater Authority property at the beginning of Segment 8. Segment 7 will consist of a 10-foot wide trail within a 20-foot wide trail easement.

Drainage improvements will include installation of one crossing. The crossing will require installation of a culvert under the trail to allow for proper water conveyance.

Segment 8

Segment 8 begins at the terminus of Segment 7. The entire segment is located on lands owned by the Sweetwater Authority. The segment follows the northeastern boundary of the Sweetwater Reservoir and parallels Jamacha Road for approximately 5,026 feet along an existing trail and terminates at the Sweetwater Authority's eastern property line with the Pointe Development. The trail width will be 8 to 10 feet wide within a 20-foot wide easement. The trail tread along a portion of the segment may be reduced to 4 feet to accommodate the Sweetwater Authority's fence.

The existing chain-link fence along the Sweetwater Authority property will be removed and set back from its existing location. The trail will continue along Sweetwater Authority property. A lodge pole fence system will be constructed on the opposite side of the trail to serve as a directional guide for users. The fence will separate trail users from construction and maintenance traffic, as well as the Urban Runoff Diversion System (URDS) and Sweetwater Reservoir.

Drainage improvements will consist of installation/improvement of two crossings across areas of disturbed freshwater marsh. One crossing will require installation of a culvert

under the trail to allow for proper stormwater conveyance. The second crossing will be the extension of an existing culvert.

Staging Area 1

Staging Area 1 is an existing facility located within the County's Summit Park and accessed at the end of the Red Hill Trail. The staging area is equipped with all the necessary amenities.

Staging Area 2

Staging Area 2 is currently a vacant lot located near the intersection of Lakeview Avenue and Quarry Road. Staging Area 2 will require the installation of facilities such as parking, bathroom and drinking water facilities, trash receptacles, equestrian hitching posts, and benches.

The loop trail project is surrounded by developed/residential uses to the north and open space parks to the south. The northeast portions of the loop trail transverse through the San Diego National Wildlife Refuge. The southwest area of the loop trail system travels through Sweetwater Regional County Park, owned and maintained by the County. The Sweetwater River exists to the east and west of the reservoir, and Spring Valley Creek exists on the northwest side of the reservoir.

The northern segments of the loop trail traverse a variety of vegetation communities. ICF, Jones & Stokes evaluated the biological resources on the project site and prepared a Biological Resources Report dated July 2008. Four sensitive plant species were identified within the project area: California adolphia (*Adolphia californica*), San Diego barrel cactus (*Ferocactus viridescens*), Otay tarplant (*Hemizonia conjugens*) and San Diego viguiera (*Viguiera laciniata*). The proposed trail project will not result in direct impacts to these sensitive plant species.

Sensitive vegetation communities identified within the project footprint include Diegan coastal sage scrub (CSS), maritime succulent scrub (MSS), non-native grassland (NNG), freshwater marsh (FWM), southern willow scrub (SWS), mule fat scrub (MFS), eucalyptus woodland (EUC), and giant reed (Arundo). Land covers on the project site include urban/developed land (DEV) and ornamental vegetation (ORN). Most of the proposed trail system will be located in previously disturbed areas; however, direct impacts may occur as a result of habitat removal for widening of existing paths for the trail segments and drainage crossings. Indirect impacts would result as a result of construction activities (i.e. noise, dust).

As shown in Table 1 below, there is 8.32 acres of coastal sage scrub (CSS) located within Segments 1, 1a, and 3 through 8, of which 6.04 acres lies within the County's MSCP Subarea Plan.

Table 1. Vegetation Impacts and Total Mitigation Required for Segments 1, 1a, and 3 through 8

Habitat	Total Onsite (ac)	Inside MSCP (ac)	Outside MSCP (ac)	Total Impacts (ac)	Mitigation Ratio	Total Mitigation Required (ac)
Mule-fat Scrub	1.19	1.19	0.0	0.0	2:1	**0.0**
Southern Willow Scrub	4.77	2.97	1.8	1.07	3:1	**3.21**
Freshwater Marsh	0.828	0.098	0.73	0.15	2:1	**0.30**
Maritime Succulent Scrub	2.94	0.21	2.73	0.13	2:1	**0.26**
Diegan Coastal Sage Scrub	8.32	6.04	2.28	1.24	1.5:1	**1.86**
Non-native Grassland	21.16	3.36	17.8	7.12	0.5:1	**3.56**
Eucalyptus Woodland	0.86	0.44	0.42	0.23	N/A	**N/A**
Developed	28.25	16.66	11.59	7.15	N/A	**N/A**
Ornamental	5.75	5.49	0.26	0.76	N/A	**N/A**
Giant Reed	0.17	0.17	0.0	0.03	N/A	**N/A**
Total	**74.238**	**37.61**	**36.628**	**14.5**	**–**	**8.255**

As shown in Table 2 below, of the 6.04 acres of coastal sage scrub (CSS) located within the County's MSCP Subarea Plan, 0.92 acres will be impacted by the proposed project. At the required 1.5:1 mitigation ratio for this impact, the total required mitigation for this impact is 1.38 acres of coastal sage scrub (CSS).

Table 2. Vegetation Impacts and Mitigation Required for Segments 1, 1a, and 3 through 8 (Inside MSCP)

Habitat	Total Onsite (ac)	Inside MSCP (ac)	Impacts Inside MSCP (ac)	Mitigation Ratio	Mitigation Required Inside MSCP (ac)
Mule-fat Scrub	1.19	1.19	0.0	2:1	**0.0**
Southern Willow Scrub	4.77	2.97	0.65	3:1	**1.95**
Freshwater Marsh	0.828	0.098	0.05	2:1	**0.10**
Maritime Succulent Scrub	2.94	0.21	0.0	2:1	**0.0**
Diegan Coastal Sage Scrub	8.32	6.04	0.92	1.5:1	**1.38**
Non-native Grassland	21.16	3.36	1.12	0.5:1	**0.56**
Eucalyptus Woodland	0.86	0.44	0.08	N/A	**N/A**
Developed	28.25	16.66	4.28	N/A	**N/A**
Ornamental	5.75	5.49	0.76	N/A	**N/A**
Giant Reed	0.17	0.17	0.03	N/A	**N/A**
Total	**74.238**	**37.628**	**9.08**	**–**	**3.34**

Mitigation for impacts within the MSCP, as identified in Table 2 above, is proposed as follows:

1. Impacts to 0.92 acre disturbed coastal sage scrub will be mitigated through deduction of 1.38 acre coastal sage scrub credits at the County's Rancho San Diego Mitigation Bank (1.5:1 ratio).

2. Impacts to southern willow scrub and freshwater marsh will be mitigated through restoration and enhancement of 2.05 acres of Spring Valley Creek (3:1 and 2:1 respectively). Portions of Spring Valley Creek that are east and south of Quarry Road are covered with dense stands of Giant Reed (*Arundo donax*) and Canary Island date (*Phoenix canariensis*) and Mexican fan palm (*Washingtonia robusta*) trees; which have removed much of the biological value of the creek. Restoration and enhancement will consist of removal of non-native species and replanting with native riparian species.

3. Impacts to 1.12 acres of non-native grasslands will be mitigated at a 0.5:1 ratio. Credits totaling 0.56 acre of non-native grassland will be deducted from the County of San Diego Rancho San Diego Mitigation Bank.

Five sensitive animal species were identified within or adjacent to the project area: California gnatcatcher (*Polioptila californica californica*; CAGN), coastal cactus wren (*Campylohynchus brunneicapillus couesi*; CAWR), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; SDBJ), orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*; OTW), and least Bell's vireo (*Vireo pusillus bellii*; LBV). Southwestern willow flycatchers (*Empidonax traillii extimus*) or arroyo toads (*Bufo microscaphus californicus*) were not observed along the proposed trail segments around the reservoir. Protocol surveys for Quino checkerspot butterfly (*Euphydryas editha quino*; QCB) and arroyo southwestern toad were performed to determine presence/absence of these species. Surveys results were negative. Arroyo toads were last detected on the northeast portion of the reservoir in 1997 and have not been detected during annual surveys conducted by the Sweetwater Authority. Southwestern willow flycatcher breeding pairs were last detected on the northeast portion of the reservoir in 1998 and 1999, one pair each year.

The proposed project would result in direct and indirect impacts to biological resources within and adjacent to the project area. Direct impacts would result as a result of habitat removal for widening of existing paths for the trail segments and drainage crossings. Indirect impacts would result as a result of construction activities (i.e. noise, dust). However, impacts have been minimized through trail design. Trail segments for the proposed project will use existing dirt paths. Trail routes were selected to avoid and minimize potential impacts to streambeds and sensitive vegetation to the maximum extent practicable.

The following design measures will be implemented prior to, and during, construction to avoid and minimize impacts to biological resources:

- Prior to the start of construction, all construction and staging area limits shall be clearly delineated with orange construction fencing to ensure that construction activity remains within the defined construction limits. A qualified biologist shall inspect the fencing prior to the start of construction and shall monitor activities during construction to avoid unauthorized impacts.
- During construction, all construction activities, including equipment storage; equipment cleaning; stock piling, etc.; shall occur within the delineated orange construction fence area. All construction staging areas shall be shown on plans.
- Natural drainage patterns shall be maintained to the extent practicable during construction. Erosion control techniques, including the use of sandbags, hay bales, and/or the installation of sediment traps shall be used to control erosion.

- Best Management Practices (BMPs) shall be implemented during construction activities which include, but are not limited to, storm drain inlet protection, stabilized construction entrance/exit areas, and silt fencing. Silt fences and fiber rolls shall be used to minimize surface transport of sediments. The construction contractor will be required to prepare and implement a *Stormwater Pollution Prevention Plan* (SWPPP). The implementation of BMPs as stated in the contract documents in accordance with the City of San Diego's and the City of Chula Vista's Stormwater Regulations would reduce water quality impacts to below level of significance.
- To prevent potential dust damage to vegetation in the conserved habitat, spraying of the construction site with clean water shall be conducted on an as-needed basis.
- The use of motorized vehicles on trails shall be prohibited.
- Natural vegetation, topography, limited fencing, and signage will be used to direct trails users to designated trails and away from sensitive habitat areas.
- Dogs must be leased as all times.
- Vegetation removal trail grading and construction will be prohibited during the bird breeding season
- No brushing, clearing and/or grading will be allowed within 300 feet of natural habitat types during the breeding season of raptors, California gnatcatcher, least Bell's vireo and other migratory birds. This is defined as occurring between February 1 and September 15 of any year. However, if it is determined, through surveys performed by a qualified biologist that no nesting birds are within 300 feet (500 feet for raptors), construction may move forward with written concurrence from the United States Fish and Wildlife Service and the California Department of Fish and Game.

Impacts to Tier I habitats (MFS, FWM, MSS) will be mitigated at a 2:1 ratio. Impacts to Tier II habitat (CSS) will be mitigated at a 1.5:1 ratio. Impacts to Tier III habitat (NNG) will be mitigated at a 0.5:1 ratio.

Impacts to southern willow scrub will be mitigated at a 3:1 ratio in accordance with the requirements set forth by the agencies having oversight of State and Federal jurisdictional resources.

Staff has determined that although the site supports native biological habitat, the removal of this habitat will not result in substantial adverse effects with mitigation incorporated, either directly or through habitat modifications, to species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

The findings contained within this document are based on County records, County Staff field site visits, and the July 2008 Biological Resources Technical Report for the Northern Segment of the Sweetwater Loop Trail Project prepared by ICF, Jones & Stokes. The information contained within these Findings is correct to the best of Staff's knowledge at the time the findings were completed. Any subsequent environmental review completed due to changes in the proposed project or changes in circumstance shall need to have new findings completed based on the environmental conditions at that time.

This project qualifies for an exemption from the Biological Mitigation Ordinance (BMO). Article III.A.9 of the BMO allows an exemption for a public facility or public project determined to be essential by the County of San Diego, including but not limited to a County Park or County recreational facility, provided that the County decision making body considering an application for such a project.

The project has been found to conform to the County's Multiple Species Conservation Program (MSCP) Subarea Plan, the Biological Mitigation Ordinance (BMO) and the Implementation Agreement between the County of San Diego, the CA Department of Fish and Game and the US Fish and Wildlife Service. Third Party Beneficiary Status and the associated take authorization for incidental impacts to sensitive species (pursuant to the County's Section 10 Permit under the Endangered Species Act) shall be conveyed only after the project has been approved by the County, these MSCP Findings are adopted by the hearing body and all MSCP-related conditions placed on the project have been satisfied.

II. Biological Resource Core Area Determination

The impact area and the mitigation site shall be evaluated to determine if either or both sites qualify as a Biological Resource Core Area (BRCA) pursuant to the BMO, Article VI.A.1.

A. Report the factual determination as to whether the proposed Impact Area qualifies as a BRCA. The Impact Area shall refer only to that area within which project-related disturbance is proposed, including any on and/or off-site impacts.

The project site qualifies for a BRCA because it is located within an area of habitat that contains biological resources that supports and/or contributes to the long-term survival of a number of sensitive species including the California

gnatcatcher, least Bell's vireo and coastal cactus wren. In addition, the project site is adjacent or contiguous to undisturbed, preserved habitats, including the San Diego National Wildlife Refuge, the County of San Diego Sweetwater Regional Park, and the Sweetwater Reservoir. The natural habitat surrounding the reservoir is identified as very high value habitat on the MSCP Biological Core Areas and Linkage map.

B. Report the factual determination as to whether the Mitigation Site qualifies as a BRCA.

The project proposes both onsite and offsite mitigation. The offsite mitigation will be located at a County approved mitigation bank within the MSCP, which would therefore qualify as a BRCA.

III. Biological Mitigation Ordinance Findings

The project is exempt from the BMO (Article III.A.9), which states that the ordinance shall not apply to:

A public facility or public project, determined to be essential by the County, including but not limited to a County Park or County recreational facility, provided that the County decision making body considering an application for such a project makes the following findings:

a. The facility or project is consistent with the County General Plan, the MSCP Plan and Subarea Plan, as approved by the Board of Supervisors;

The project is consistent with the County General Plan, MSCP Plan, and Subarea Plan. The proposed project to improve the northern portion of the Sweetwater Reservoir Loop Trail and to provide a connection to existing trails to the west is consistent with the County General Plan because the proposed project was designed to provide a system of public parks, riding and hiking trails, and outdoor recreation facilities; which not only preserve significant areas of natural beauty for citizen enjoyment, but also serve the needs of the citizens in their immediate environments. The proposed Sweetwater Reservoir Loop Trail is consistent with the MSCP plan because it will have no adverse effects on sensitive species as all temporary and permanent impacts will be mitigated as outlined in the MSCP plan. And the project is consistent with the Subarea Plan because the project will provide for the conservation of populations of covered species and representation of their sensitive habitats.

b. All feasible mitigation measures have been incorporated into the facility or project, and there are no feasible, less environmentally damaging locations, alignments or non-structural alternatives that would meet project objectives;

The proposed project is designed to connect to the existing southern portion of the Sweetwater Reservoir Loop Trail and to provide a connection to existing trails to the west so as to provide residents with non-motorized recreational opportunities completely around the reservoir. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, approximately 5.3 miles in length, as well as an approximate 0.64 mile long trail segment connecting the loop trail to existing trails to the west. The northern trail alignment and connection segment (Segment 1a) will utilize the existing trail, paths, and disturbed areas to the maximum extent practicable. In addition, the pedestrian/equestrian bridge in Segment 3 will be built outside the limits of the jurisdictional boundaries to minimize impacts to sensitive resources.

All feasible mitigation and avoidance measures have been incorporated into the proposed project to insure project objectives have been met. The project has incorporated design measures to avoid and minimize impacts to sensitive resources. These measures include the prohibition of the use of motorized vehicles on trails, the use of natural vegetation, topography, trail markers, limited fencing, and signage to direct trails users to designated trails and away from sensitive habitat areas, the requirement that dogs must be leased as all times, trail grading and construction shall be prohibited during the bird breeding season (February 1 – September 15), trails adjacent to wetlands or other sensitive habitats shall be no greater than 4 feet wide, and the application of Best Management Practices (BMP) for erosion and sediment control.

Impacts to sensitive habitat types will be mitigated in conformance with the Biological Mitigation Ordinance (BMO). Impacts to Diegan costal sage scrub (Tier II) will be mitigated at a ratio of 1.5:1. Impacts to non-native grasslands (Tier III) will be mitigated at a 0.5:1 ratio. Impacts to freshwater marsh (Tier I) will be mitigated at a ratio of 2:1. Impacts to disturbed southern willow scrub and maritime succulent scrub (Tier I) will be mitigated at 3:1 and 2:1 ratios, respectively. Mitigation is not required for impacts to eucalyptus woodland, giant reed, ornamental landscaping, and developed lands.

In addition, vegetation removal, trail grading, and construction is restricted during the breeding season within 300 feet (500 feet for raptors) of natural habitat for types of raptors, California gnatcatcher, least Bell's vireo, and other migratory birds. If a qualified biologist determines that no nesting birds are within 300 feet (500 feet for raptors), construction may proceed with written concurrence from the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). Biological monitoring is required during construction to evaluate the potential for indirect impacts to raptors, migratory birds, and other sensitive biological resources on site.

c. Where the facility or project encroaches into a wetland or floodplain, mitigation measures are required that result in a net gain in wetland and/or riparian habitat;

The proposed northern trail segments cross several named and unnamed drainages. Several of these drainages were delineated as Army Corps of Engineers (ACOE) wetlands, California Department of Fish and Game (CDFG) streambeds, and Regional Water Quality Control Board (RWQCB) jurisdictional resources.

Impacts to jurisdictional resources will be minimized to the maximum extent practicable. The construction of the bridge across Spring Valley Creek will be placed outside of the jurisdictional limits to avoid impacts to resources. Drainage improvements along the northern trail are necessary in to maintain a safe passage and properly convey stormwater. Impacts include grading and the placement of crushed rock, culverts or small footbridges. Impacts to jurisdictional resources will be mitigated at a ratio of 2:1 to result in a net gain in wetland/riparian habitat.

d. Where the facility or project encroaches into steep slopes, native vegetation will be used to revegetate and landscape cut and fill areas;

There are no steep slopes located within the project area; therefore, the project will not impact these resources.

e. No mature riparian woodland is destroyed or reduced in size due to otherwise allowed encroachments; and

No mature riparian woodland will be destroyed or reduced in size as a result of this project.

f. All Critical Populations of Sensitive Plant Species Within the MSCP Subarea, (Attachment C); Rare, Narrow Endemic Animal Species Within the MSCP Subarea, (Attachment D); Narrow, Endemic Plant Species Within the MSCP Subarea, (Attachment E); and San Diego County Sensitive Plant Species, as defined herein will be avoided as required by, and consistent with, the terms of the Subarea Plan.

The following rare, narrow endemic animal and plant species within the MSCP Subarea were observed within or adjacent to the project site: least Bell's vireo (*Vireo belli pusillus*), coastal cactus wren (*Empidonax traillii extimus*), and Otay tarplant (*Hemizonia conjugens*). The following sensitive plants were found with in the project site, California Adolphia (*Adolphia californica*), San Diego Barrel Cactus (*Ferocactus viridescens*), and San Diego Viguiera (*Viguiera laciniata*). The proposed trail improvements will avoid all sensitive plant species. Project design measures and mitigation measures as described above will be incorporated to minimize direct and indirect impacts to all sensitive plant and animal species.

IV. Subarea Plan Findings

Conformance with the objectives of the County Subarea Plan is demonstrated by the following findings:

1. The project will not conflict with the no-net-loss-of-wetlands standard in satisfying State and Federal wetland goals and policies.

The proposed northern trail segments cross several named and unnamed drainages. Several of these drainages were delineated as Army Corps of Engineers (ACOE) wetlands, California Department of Fish and Game (CDFG) streambeds, and Regional Water Quality Control Board (RWQCB) jurisdictional resources.

Impacts to jurisdictional resources will be minimized to the maximum extent practicable. The construction of the bridge across Spring Valley Creek will be placed outside of the jurisdictional limits to avoid impacts to resources.

Drainage improvements along the northern trail are necessary in to maintain a safe passage and properly convey stormwater. Impacts include grading and the placement of crushed rock, culverts or small footbridges. Impacts non-jurisdictional resources will be mitigated at a ratio of 2:1. Impacts to jurisdictional resources will be mitigated at a 3:1 ratio. This will result in a net gain in wetland/riparian habitat and will not conflict with the no-net-loss-of-wetlands standard in satisfying State and Federal wetland goals and policies.

2. **The project includes measures to maximize the habitat structural diversity of conserved habitat areas including conservation of unique habitats and habitat features.**

The proposed northern section of the Sweetwater Loop Trial will connect to the existing southern portion and will allow for non-motorized recreational opportunities completely around the Sweetwater Reservoir. Segment 1a will connect the loop trail to existing trails to the west. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, the construction of drainage crossings over several named and unnamed drainages, and two staging areas. The northern trail alignment will utilize existing trail tread to the maximum extent practicable. The site and surrounding area contains coastal sage scrub, freshwater marsh, eucalyptus woodland, non-native grassland, southern willow scrub, and mule fat scrub. Segment 1a will be constructed on an existing dirt path that follows the fence line of the Bonita Golf Course.

Structurally diverse habitats are present on site. The project has incorporated design measures to conserve the habitats on site. These measures include the use of existing trail, paths, and disturbed areas to the maximum extent practicable, the prohibition of the use of motorized vehicles on trails, the use of natural vegetation, topography, limited fencing, and signage to direct trails users to designated trails and away from sensitive habitat areas, the requirement that dogs must be leashed at all times, and trails adjacent to wetlands or other sensitive habitats shall be no greater than 4 feet wide.

3. **The project provides for conservation of spatially representative examples of extensive patches of Coastal sage scrub and other habitat types that were ranked as having high and very high biological values by the MSCP habitat evaluation model.**

The proposed improvement and formalization of the northern portion of the Sweetwater Reservoir Loop Trail contains extensive patches of Coastal sage scrub and other habitat types that were ranked as having high and very high biological values by the MSCP evaluation model. However, the project has incorporated design measures that provides for the conservation of these habitats. These measures have been discussed in the previous section. The project will impact approximately 0.92 acre of coastal sage scrub. The project proposes to mitigate for those impacts at a ratio of 1.5:1 at a Rancho San Diego mitigation bank located on the San Diego National Wildlife Refuge.

4. The project provides for the creation of significant blocks of habitat to reduce edge effects and maximize the ratio of surface area to the perimeter of conserved habitats.

The proposed project will connect to the existing southern portion that will allow non-motorized, recreational opportunities completely around the Sweetwater Reservoir. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, the construction of drainage crossings over several named and unnamed drainages, and two staging areas. The northern trail alignment will utilize existing trail tread to the maximum extent practicable.

The site and surrounding area contains coastal sage scrub, freshwater marsh, eucalyptus woodland, non-native grassland, southern willow scrub, and mule fat scrub. The project will result in permanent impacts to approximately 0.05 acre of freshwater marsh, 0.92 acre of coastal sage scrub, 1.12 acres of non-native grassland, and 0.65 acre of southern willow scrub. Impacts to sensitive habitat types will be mitigated in conformance with the Biological Mitigation Ordinance (BMO). Impacts to Diegan costal sage scrub (a Tier II habitat) will be mitigated at a ratio of 1.5:1. Impacts to non-native grasslands (Tier III habitat) will be mitigated at a 0.5:1 ratio. Impacts to freshwater marsh (a Tier I habitat) will be mitigated at a ratio of 2:1. Impacts to disturbed southern willow scrub and maritime succulent scrub (Tier I habitats) will be mitigated at 3:1 and 2:1 ratios, respectively. Mitigation is not required for impacts to eucalyptus woodland, giant reed, ornamental landscaping, and developed lands.

The project will conserve the majority of habitat onsite. All feasible mitigation measures have been incorporated into this project. The project provides to the creation and preservation of significant blocks of habitat. The project will

not result in edge effects and will remain connected to adjacent conserved habitats.

5. The project provides for the development of the least sensitive habitat areas.

The proposed project will connect to the existing southern portion that will allow non-motorized recreational opportunities completely around the Sweetwater Reservoir. In addition, the project will add a trail segment that will connect the loop trail to existing trails to the west (Segment 1a). The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, the construction of drainage crossings over several named and unnamed drainages, and two staging areas. The northern trail alignment will utilize existing trail tread to the maximum extent practicable and provide for the development of the least sensitive habitat areas.

6. The project provides for the conservation of key regional populations of covered species, and representations of sensitive habitats and their geographic sub-associations in biologically functioning units.

The proposed project will connect to the existing southern portion that will allow non-motorized recreational opportunities completely around the Sweetwater Reservoir. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, the construction of drainage crossings over several named and unnamed drainages, and two staging areas. The northern trail alignment will utilize existing trail tread to the maximum extent practicable. The project will avoid impacts to sensitive plant species and conserve the majority of habitat onsite. Formalization of the trail will minimize the creation of additional informal trails. Therefore, the project provides for the conservation of key regional populations of covered species, and representation of sensitive habitats and their geographic sub associations in biologically functioning units.

Impacts to habitats are as follows: 0.05 acre of freshwater marsh, 0.92 acre of coastal sage scrub, 1.12 acres of non-native grassland, and 0.65 acre of southern willow scrub. All feasible mitigation measures have been incorporated into this project. Impacts to sensitive habitat types will be mitigated in conformance with the Biological Mitigation Ordinance (BMO).

Impacts to Diegan costal sage scrub (a Tier II habitat) will be mitigated at a ratio of 1.5:1. Impacts to non-native grasslands (Tier III habitat) will be mitigated at a 0.5:1 ratio. Impacts to freshwater marsh (a Tier I habitat) will be mitigated at a ratio of 2:1. Impacts to disturbed southern willow scrub and maritime succulent scrub (Tier I habitats) will be mitigated at 3:1 and 2:1 ratios, respectively. Mitigation is not required for impacts to eucalyptus woodland, giant reed, ornamental landscaping, and developed lands. Construction activities will be restricted during the bird breeding season (February 1 to September 15) to minimize impacts to sensitive species.

7. **Conserves large interconnecting blocks of habitat that contribute to the preservation of wide-ranging species such as Mule deer, Golden eagle, and predators as appropriate. Special emphasis will be placed on conserving adequate foraging habitat near Golden eagle nest sites.**

The proposed project will connect to the existing southern portion that will allow non-motorized recreational opportunities completely around the Sweetwater Reservoir. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, the construction of drainage crossings over several named and unnamed drainages, and two staging areas. The northern trail alignment will utilize existing trail tread to the maximum extent practicable. An additional trail segment will be constructed to connect the loop trail to existing trails to the west (Segment 1a). Both the northern trail alignment and connection trail will utilize existing trail tread to the fullest extent. The project will conserve almost the entire habitat with in the project area.

The project is bordered by residential development on the north throughout the proposed northern segments. Segment 5 and a portion of segment 6 are also bordered by residential development to the south. Segment 1a is bordered by recreational uses (golf course) to the north and residential to the south. The Sweetwater Reservoir and the natural habitats surrounding the Reservoir are identified by the County of San Diego as very high value habitat on their MSCP Biological Core Areas and Linkage Map. These areas provide habitat to many sensitive plant and wildlife species that connects to undeveloped portions of eastern San Diego County including Rancho San Diego National Wildlife Refuge and the San Miguel and Jamul Mountains. Very minimal impacts to habitat are proposed for this project and they will be mitigated at appropriate levels.

8. All projects within the San Diego County Subarea Plan shall conserve identified critical populations and narrow endemics to the levels specified in the Subarea Plan. These levels are generally no impact to the critical populations and no more than 20 percent loss of narrow endemics and specified rare and endangered plants.

No critical populations of sensitive plant species existing within the project site. The following rare, narrow endemic animal species have been detected or have the potential to occur at the site and in surrounding areas along the northern trail segments as determined during the 2004-2005 surveys: least Bell's vireo (*Vireo pusillus bellii*), and coastal cactus wren (*Campylohynchus brunneicapillus couesi*). One narrow endemic plant Otay Tar Plant (*Hemizonia conjugens*) was detected within the project site. The following sensitive plants were found within the project site, California Adolphia (*Adolphia californica*), San Diego Barrel Cactus (*Ferocactus viridescens*) and San Diego Viguiera (*Viguiera laciniata*). However, no narrow endemic or endangered plants will be impacted as result of this project. Project design measures as described above will be included to minimize indirect impacts to sensitive plant communities. Therefore, the project will conserve critical populations and narrow endemics to the levels specified in the Subarea Plan.

9. No project shall be approved which will jeopardize the possible or probable assembly of a preserve system within the Subarea Plan.

The proposed project will connect to the existing southern portion that will allow non-motorized recreational opportunities completely around the Sweetwater Reservoir and provide a connection to existing trails to the west. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, the construction of drainage crossings over several named and unnamed drainages, and two staging areas. The northern trail alignment will utilize existing trail tread to the maximum extent practicable. The project will minimize impacts to sensitive habitats including large patches of coastal sage scrub, maritime succulent scrub, and riparian habitats adjacent to Sweetwater Reservoir. Therefore, the project will not jeopardize the possible or probable assembly of a preserve system within the Subarea Plan.

10. All projects that propose to count on-site preservation toward their mitigation responsibility must include provisions to reduce edge effects.

The proposed project is located within the Sweetwater Valley Regional Park, an open space park owned and operated by the County as well as on lands owned and controlled by the Sweetwater Authority. Both entities have the ability to manage uses within their respective lands. If it is determined that a portion of the project mitigation will occur within lands controlled by the Sweetwater Authority or the County of San Diego, the following measures will be implemented to minimize the potential for edge effects:

- The use of motorized vehicles on trails will be prohibited, except for wheelchairs, maintenance and emergency vehicles.

- Natural vegetation, topography, limited fencing, and signage will be used to direct trails users to designated trails and away from sensitive habitat areas.

- Dogs must be leased as all times and on designated trails only.

Additional measures will be implemented as necessary.

11. Every effort has been made to avoid impacts to BRCAs, to sensitive resources, and to specific sensitive species as defined in the BMO.

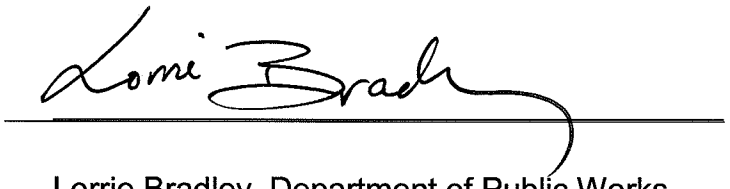
The proposed project will connect to the existing southern portion that will allow non-motorized recreational opportunities completely around the Sweetwater Reservoir. In addition, a trail segment (Segment 1a) will be constructed to connect the loop trail to existing trails to the west. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir, the construction of drainage crossings over several named and unnamed drainages, and two staging areas. The northern trail alignment will utilize existing trail tread to the maximum extent practicable.

The project will result in permanent impacts to approximately 0.05 acre of freshwater marsh, 0.92 acre of coastal sage scrub, 1.12 acres of non-native grassland, and 0.65 acre of southern willow scrub. All feasible mitigation measures have been incorporated into this project. Impacts to sensitive

habitat types will be mitigated in conformance with the Biological Mitigation Ordinance (BMO). Impacts to Diegan costal sage scrub (a Tier II habitat) will be mitigated at a ratio of 1.5:1. Impacts to non-native grasslands (Tier III habitat) will be mitigated at a 0.5:1 ratio. Impacts to freshwater marsh (a Tier I habitat) will be mitigated at a ratio of 2:1. Impacts to disturbed southern willow scrub and maritime succulent scrub (Tier I habitats) will be mitigated at 3:1 and 2:1 ratios, respectively. Mitigation is not required for impacts to eucalyptus woodland, giant reed, ornamental landscaping, and developed lands.

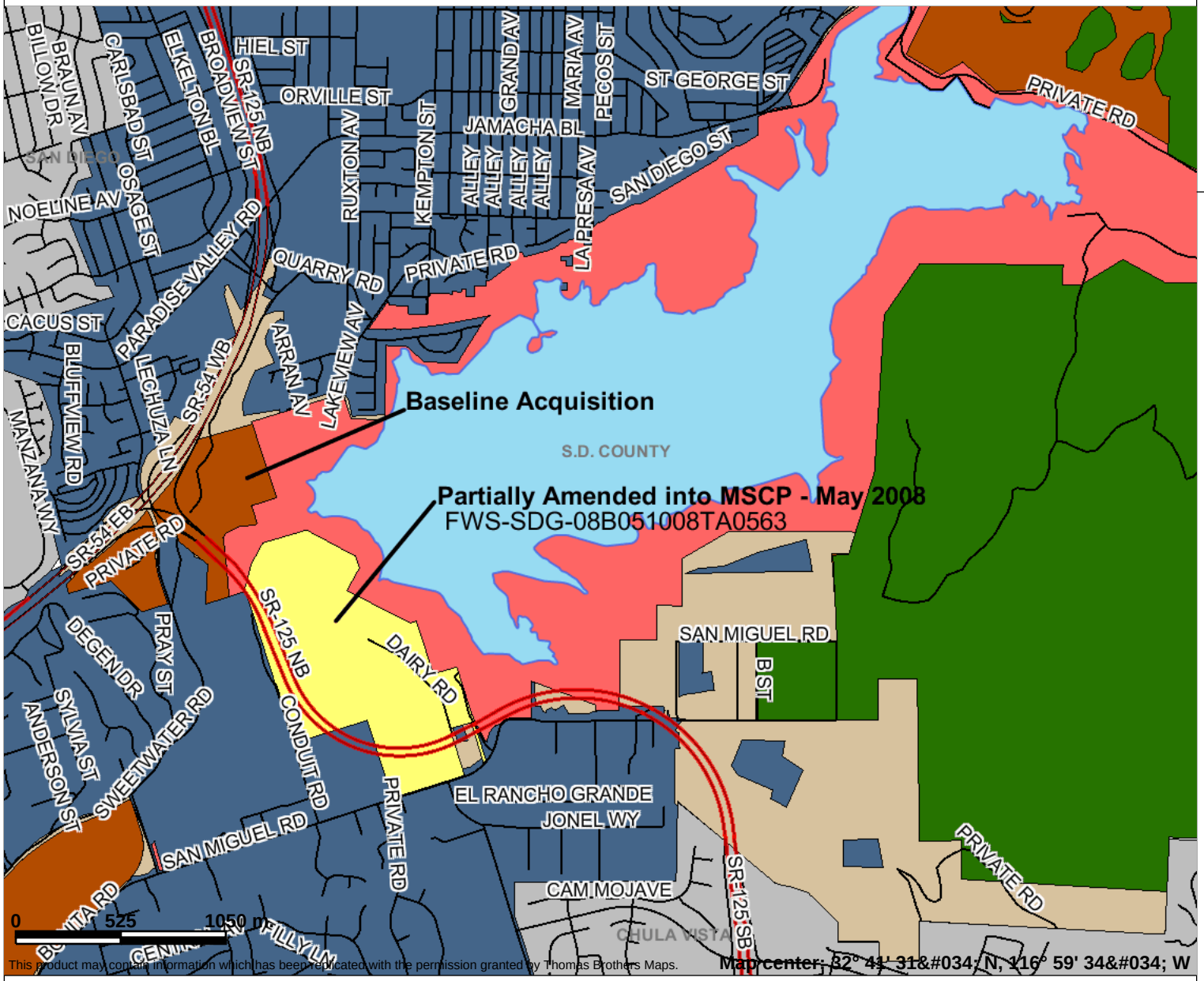
To reduce potential indirect impacts to sensitive biological habitats and species including nesting birds the following design measures have been incorporated into the project: utilizing existing trails, paths, and disturbed areas to the maximum extent practicable, prohibition of motorized vehicles on trails, the use of natural vegetation, topography, limited fencing, and signage to direct trails users to designated trails and away from sensitive habitat areas, the requirement that dogs must be leased as all times. In addition, tail grading and construction will be prohibited during the bird breeding season (February 1 – September 15) unless it is determined that nesting birds are not present, and trails adjacent to wetlands or other sensitive habitats will be no greater than 4 feet wide.

No feasible less environmentally damaging alternative could be employed that would allow implementation of this essential public project. Best Management Practices (BMPs) including gravel bags, fiber rolls and silt fencing, will be implemented throughout the project site during and after construction.

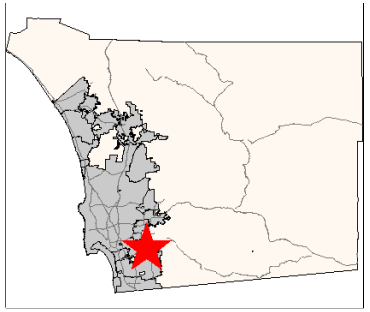
BY: 

Lorrie Bradley, Department of Public Works
August 20, 2008

Sweetwater Loop Trail MSCP Designations



Map center: 32° 41' 31" N, 116° 59' 34" W



Legend

- Highways
- Freeways
- Streets
- Water Bodies
- Water Bodies

MSCP_Designations - South

- Hardline Preserve
- Pre-Approved Mitigation Area (PAMA)
- Major Amendment Area
- Minor Amendment Area
- Minor Amendment Area Subject to Special Considerations
- Conserved Subject to Agreement with Wildlife Agencies
- Santa Fe Valley Open Space II
- Santa Fe Valley 'D' Designator
- Otay Ranch Areas Where No Take Permits will be Issued
- Take Authorized Area
- Unicorporated Land in Metro-Lakeside-Jamul Segment
- Other

Incorporated Areas

- S.D. COUNTY
- Other

N

Scale: 1:29,854

County of San Diego
Department of Planning and Land Use
DPLU GIS
SanGIS